IN THE CLAIMS:

Set forth below in ascending order, with status identifiers, is a complete listing of all claims currently under examination. Changes to any amended claims are indicated by strikethrough and underlining. This listing also reflects any cancellation and/or addition of claims.

Claim 1 (original)

A method for deprotecting a Fmoc protected amino group, said method comprising treating in a suitable medium the protected amino group with a base in the presence of a thiol compound to yield a deprotected amino group.

Claim 2 (currently amended)

The method of Claim 1 wherein said base is selected from the group consisting of 1,8-diazabicyclo[5.4.0]undec-7-ene~~1,8-diazabicyclo[5.4.o]undec-7-ene~~, pyridine, triethylamine, lutidine, diisopropylethylamine, piperidine, 1,5-diazabicyclo[4.3.0]non-5-ene and mixtures thereof.

Claim 3 (original)

The method of Claim 1 wherein the thiol compound is bound to a solid support or is in solution.

Claim 4 (original)

The method of Claim 3 wherein the thiol compound is bound to a solid support.

Claim 5 (original)

The method of Claim 3 wherein the thiol compound is in solution.

Claim 6 (original)

The method of Claim 1 wherein the thiol compound is aliphatic.

Claim 7 (original)

The method of Claim 5 wherein the thiol compound comprises a thiol group attached to said compound by a methylene group.

Claim 8 (currently amended)

The method of Claim 1 wherein the thiol compound is selected from the group consisting of octane thiol, benzyl mercaptan, N-(2-mercapto ethyl)aminomethyl~~N-(2-mercaptp ethyl)aminomethyl~~ polystyrene resin, hexane thiol, cyclohexylmethane thiol, cyclohexane thiol and thiophenol.

Claim 9 (original)

The method of Claim 8 wherein the medium is selected from THF, methanol, isopropanol, dioxane, toluene, acetonitrile, hexanes, pyridine, benzene or mixtures thereof.

Claim 10 (original)

The method of Claim 1 wherein the medium is selected from the group consisting of tetrahydrofuran, dioxane, toluene, dimethylformamide, dimethylsulfoxide, dimethyl acetamide, dichloromethane, N-methyl pyrrolidinone, methanol, isopropanol, acetonitrile, hexanes, pyridine, benzene, a pure thiol and mixtures thereof.

Claim 11 (original)

The method of Claim 1 wherein the medium has a boiling point below about 120°C.

Claim 12 (original)

The method of Claim 1 wherein the Fmoc protected amino group is used in an amount equal to about 1 equivalents, the base is used in an amount equal to about 0.1 to 0.5 equivalents and the thiol compound is used in an amount equal to about 5 to 15 equivalents.

Claim 13 (original)

The method of Claim 12 wherein the base is used in an amount equal to about 0.1 to 0.25 equivalents and the thiol compound is used in an amount equal to about 5 to 10 equivalents.

Claim 14 (currently amended)

The method of Claim 1 wherein the base is 1,8-diazabicyclo[5.4.0]undec-7-ene~~1,8-diazabicyclo[5.4.o]undec-7-ene~~ and the thiol compound is 1-octanethiol~~1-octanetiol~~.

Claim 15 (original)

A method for deprotecting a Fmoc protected amino group having the formula Fmoc-NR^1R^2, said method comprising treating in a suitable medium the protected amino group with a base in the presence of a thiol compound to yield a deprotected amino group having the Formula HNR^1R^2; wherein R^1 and R^2 are moieties that bind to an amino group to form a stable compound.

Claim 16 (currently amended)

The method of Claim 15 wherein said base is selected from the group consisting of 1,8-diazabicyclo[5.4.0]undec-7-ene~~1,8-diazabicyclo[5.4.o]undec-7-ene~~, pyridine, triethylamine, lutidine, diisopropylethylamine, piperidine, 1,5-diazabicyclo[4.3.0]non-5-ene and mixtures thereof.

Claim 17 (original)

The method of Claim 15 wherein the thiol compound is bound to a solid support or is in solution.

Claim 18 (currently amended)

The method of Claim 17 wherein the thiol compound is selected from the group consisting of octane thiol, benzyl mercaptan, N-(2-mercapto ethyl)aminomethyl~~N-(2-mercaptp ethyl)aminomethyl~~ polystyrene resin, hexane thiol, cyclohexylmethane thiol, cyclohexane thiol and thiophenol.

Claim 19 (original)

The method of Claim 15 wherein the medium is selected from the group consisting of tetrahydrofuran, dioxane, toluene, dimethylformamide, dimethylsulfoxide, dimethyl acetamide, dichloromethane, N-methyl pyrrolidinone, methanol, isopropanol, acetonitrile, hexanes, pyridine, benzene, a pure thiol and mixtures thereof.

Claim 20 (original)

The method of Claim 15 wherein R^1 and R^2 are selected from the group consisting of optionally substituted alkyls, optionally substituted aryls, optionally substituted heteroaryls and optionally substituted alkoxy groups.

Claim 21 (original)

The method of Claim 20 wherein R^1 and R^2 are selected from the group consisting of 2-hydroxy-1-hydroxymethyl-2-phenyl-ethylamino, 2-hydroxy-1-hydroxymethyl-3-methyl-pentylamino, 1-benzyl-2-hydroxy-ethylamino, 1-hydroxymethyl-3-methyl-butylamino, 4-amino-piperidine-1-carboxylic acid ethyl ester, 2-acetylamino-ethylamino, 2-diethylamino-ethylamino, 2-(2-hydroxy-ethoxy)-ethylamino, 3-diethylamino-propylamino, 3-hydroxy-propylamino, 6-hydroxy-hexylamino, 3-imidazol-1-yl-propylamino, 2-(4-sulfamoyl-phenyl)-ethylamino, 3-(4-methyl-piperazin-1-yl)-propylamino, 2-dimethylamino-1-methyl-ethylamino, 2-[bis-(2-hydroxy-ethyl)-amino]-ethylamino, 1-carbamoyl-2-phenyl-ethylamino, 2-dibutylamino-ethylamino, 5-hydroxy-4,4-dimethyl-pentylamino, 3-dimethylamino-2,2-dimethyl-propylamino, 2-(butyl-ethyl-amino)-ethylamino, 2-diisobutylamino-ethylamino, 2-hydroxy-butylamino, 3-hydroxy-2,2-dimethyl-propylamino, cyclohexylamino, (5-hydroxy-1,3,3-trimethyl-cyclohexylmethyl)-amino, 1,2,3,4-tetrahydro-naphthalen-1-ylamino, cyclooctylamino, 3-(2-oxo-pyrrolidin-1-yl)-propylamino, indan-1-ylamino, (tetrahydro-furan-2-ylmethyl)-amino, 2-(1h-indol-3-yl)-ethylamino, (benzo[1,3]dioxol-5-ylmethyl)-amino, 3-morpholin-4-yl-propylamino, 2-pyridin-2-yl-ethylamino, 2-hydroxy-1-methyl-2-phenyl-ethylamino, 1-methoxy-ethylamino, 1-methyl-3-phenyl-propylamino, 3-diethylamino-1-methyl-propylamino, benzylamino, 2-fluoro-benzylamino, 2-methoxy-benzylamino, 3-trifluoromethyl-benzylamino, 2-phenylamino-ethylamino, 2-methoxy-ethylamino, phenethylamino, 2-(2-methoxy-phenyl)-ethylamino, 2-(3,4-dimethoxy-phenyl)-ethylamino, 2-(4-chloro-phenyl)-ethylamino, 2-(4-methoxy-phenyl)-

ethylamino, 2-(4-hydroxy-phenyl)-ethylamino, 3,3-diphenyl-propylamino, 2,5-dimethyl-benzylamino, 2-trifluoromethyl-benzylamino, butylamino, 1,2-diethyl-pyrazolidin-4-ylamino, 3-methoxy-propylamino, 2-diisopropylamino-ethylamino, 1-isopropyl-2-methyl-propylamino, 3-m-tolylamino-pentylamino, 3-butoxy-propylamino, 1-(4-fluoro-phenyl)-ethylamino, 1-methoxymethyl-propylamino, 2,3-dimethoxy-benzylamino, 2,4-dimethoxy-benzylamino, 2-(2-chloro-6-fluoro-benzylsulfanyl)-ethylamino, 2,6-dimethoxy-benzylamino, 3,5-dimethoxy-benzylamino, 2-phenoxy-ethylamino, 1-benzyl-pyrrolidin-3-ylamino, 2-(2,3-dimethoxy-phenyl)-ethylamino, 2-(2,5-dimethoxy-phenyl)-ethylamino, 2-(2-ethoxy-phenyl)-ethylamino, 2-(3,5-dimethoxy-phenyl)-ethylamino, 2-(4-ethoxy-phenyl)-ethylamino, 2-(4-trifluoromethoxy-phenyl)-ethylamino, 2-hydroxy-1,2-diphenyl-ethylamino, 2-hydroxy-1,2-diphenyl-ethylamino, 2-(2-hydroxymethyl-phenylsulfanyl)-benzylamino, 2-(3-fluoro-phenyl)-ethylamino, 2-(2-amino-phenyl)-benzylamino, 2-(2-fluoro-phenyl)-ethylamino, 4-amino-benzylamino, 2-(3,4-dimethoxy-phenyl)-ethylamino, 1,2-dihydroxy-2-(4-methylsulfanyl-phenyl)-ethylamino, 2-hydroxy-cyclohexylamino, and 3-(methyl-phenyl-amino)-propylamino.

Claim 22 (original)

A method for deprotecting a Fmoc protected amino group, said method comprising treating in a suitable medium the protected amino group with a base in the presence of a thiol compound having the formula R^3-SH to yield a deprotected amino group; where R^3 is selected from the group consisting of aliphatic, aryl, heteroaryl and heterocycloalkyl moieties.

Claim 23 (currently amended)

The method of Claim 22 wherein said base is selected from the group consisting of 1,8-diazabicyclo[5.4.0]undec-7-ene~~1,8-diazabicyclo[5.4.0]undec-7-ene~~, pyridine, triethylamine, lutidine, diisopropylethylamine, piperidine, 1,5-diazabicyclo[4.3.0]non-5-ene and mixtures thereof.

Claim 24 (original)

The method of Claim 22 wherein the thiol compound is bound to a solid support or is in solution.

Claim 25 (original)

The method of Claim 24 wherein the thiol compound is bound to a solid support.

Claim 26 (original)

The method of Claim 24 wherein the thiol compound is in solution.

Claim 27 (original)

The method of Claim 22 wherein R^3 is an aliphatic group.

Claim 28 (original)

The method of Claim 27 wherein the thiol compound comprises a thiol group attached to said compound by a methylene group.

Claim 29 (original)

The method of Claim 22 wherein R^3 is an aryl group.

Claim 30 (original)

The method of Claim 22 wherein R^3 is a heteroaryl group.

Claim 31 (original)

The method of Claim 22 wherein R^3 is a heterocycloalkyl group.

Claim 32 (currently amended)

The method of Claim 22 wherein the thiol compound is selected from the group consisting of octane thiol, benzyl mercaptan, N-(2-mercapto ethyl)aminomethyl~~N-(2-mercaptp ethyl)aminomethyl~~ polystyrene resin, hexane thiol, cyclohexylmethane thiol, cyclohexane thiol and thiophenol.

Claim 33 (original)

The method of Claim 22 wherein the medium is selected from the group consisting of tetrahydrofuran, dioxane, toluene, dimethylformamide, dimethylsulfoxide, dimethyl acetamide,

dichloromethane, N-methyl pyrrolidinone, methanol, isopropanol, acetonitrile, hexanes, pyridine, benzene, a pure thiol and mixtures thereof.